UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR ATTORNEY DOCKET NO.		CONFIRMATION NO.	
10/565,012	07/05/2006	Shigeo Kittaka	2842.43US01	5168	
	7590 04/04/2007 THUENTE, SKAAR & C	EXAMINER			
4800 IDS CEN'	TER	LEUNG, QUYEN PHAN			
80 SOUTH 8TH	H STREET S, MN 55402-2100	ART UNIT	PAPER NUMBER		
MININEALOE	, MIN 33402-2100	2874			
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE		
31 DAYS 04/04/2007			PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	-	1	Application N	О.	Applicant(s)				
Office Action Summary			10/565,012		KITTAKA ET AL.				
		. 1	Examiner		Art Unit				
			Quyen P. Leui	ng	2874				
Period fo	The MAILING DATE of this commun or Reply	nication appea	ars on the co	ver sheet with the c	orrespondence ac	ldress			
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD F CHEVER IS LONGER, FROM THE Masions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this come period for reply is specified above, the maximum some to reply within the set or extended period for reply reply received by the Office later than three months and patent term adjustment. See 37 CFR 1.704(b).	MAILING DAT s of 37 CFR 1.136(munication. tatutory period will y will, by statute, ca	TE OF THIS ((a). In no event, h apply and will exp ause the application	COMMUNICATION owever, may a reply be timing SIX (6) MONTHS from to become ABANDONE	N. nely filed the mailing date of this o D (35 U.S.C. § 133).				
Status									
1)	Responsive to communication(s) file	ed on							
2a)□	•	2b)⊠ This a		final.					
3)⊡		·—			secution as to the	e merits is			
٠,۵	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims			,					
•	4) Claim(s) <u>1-58</u> is/are pending in the application.								
•	4a) Of the above claim(s) is/are withdrawn from consideration.								
	Claim(s) is/are allowed.								
	c) Claim(s) is/are allowed. Claim(s) is/are rejected.								
• —	 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) 1-58 are subject to restriction and/or election requirement. 								
♥/ <u>₽3</u>	(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c								
Applicati	ion Papers								
9)[The specification is objected to by the	ne Examiner.							
10)	The drawing(s) filed on is/are	: a) 🗌 accep	oted or b)	objected to by the	Examiner.	•			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
	Replacement drawing sheet(s) including	g the correctio	n is required it	the drawing(s) is ob	jected to. See 37 C	FR 1.121(d).			
11)	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ι	under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:									
	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
	3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.									
	see the attached detailed office active			·					
Attachmen	it(s)		•						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date									
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application									
Paper No(s)/Mail Date 6) Other:									

Art Unit: 2874

DETAILED ACTION

Election/Restrictions

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Species I: Photonic crystal waveguide

Species II: Homogeneous medium waveguide

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Species I: claims 1-29, 45-51

Species II: claims 30-44, 52-58

Application/Control Number: 10/565,012

Art Unit: 2874

The following claim(s) are generic: none.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: species I requires a core formed of a photonic crystal whereas species II requires a core formed of a homogeneous medium.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

Art Unit: 2874

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quyen P. Leung whose telephone number is (571) 272-8188. The examiner can normally be reached on normally M-F, 6:15 am - 2:45 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Primary Patent Examiner
Group Art Unit 2874